(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: **US 2018/0167677 A1**

Husain et al. (43) **Pub. Date:** **Jun. 14, 2018**

(54) **BROADCAST CONTENT VIEW ANALYSIS BASED ON AMBIENT AUDIO RECORDING**

(71) Applicant: **Facebook, Inc.**, Menlo Park, CA (US)

(72) Inventors: **Aliasgar Mumtaz Husain**, Milpitas, CA (US); **Yali Xu**, Seattle, WA (US)

(57) **ABSTRACT**

An online system analyzes broadcast content viewed by individuals in a household. Each individual in the household is associated with a client device on which a software application module is executed. When the software application module detects one or more broadcasting signals of a content item broadcasted to the household, the software application module records the ambient audio, including audio from the broadcasting device. The software application module sends an identifier of the individual associated with the client device, an ambient audio fingerprint derived from the recorded ambient audio, and time information for the recorded ambient audio to the online system. The online system, based on the ambient audio data, identifies the corresponding individual and content item and logs an impression for the content item upon determination that there was an impression of the identified content item by the identified individual.